

Abstract

Information system is nowadays needed by many, including the hospital. One form of such information system for is the Electronic Health Management System (EHMS) which is needed to ease the hospital managing its' patients medical records from various data sources. In this EHMS, there is an Electronic Health Data Mining (EHDM) system that utilizes how data mining works in science to process data in the EHMS. To support this system, a drug-prescription system is proposed. In this thesis, research is focused on medical records for patients with diabetes mellitus (DM). This illness is chosen because the number of this disease is currently increasing in Indonesia as it becomes the 5th largest population of DM patients in the world.

To apply drug-prescription for DM patient system, an algorithm called Dynamic Itemset Counting (DIC) which is an extension of Apriori Algorithm is used. The difference between DIC Algorithm with Apriori Algorithm is the DIC Algorithm doesn't require time to wait for a complete reading of the database to calculate the itemset candidate. Source used in this study is medical record information and lists of DM patients' medicines. The result shows linkage of data itemset that generates drug prescription.

Keyword : *association rule, data mining, diabetes melitus, dynamic itemset counting (dic)*